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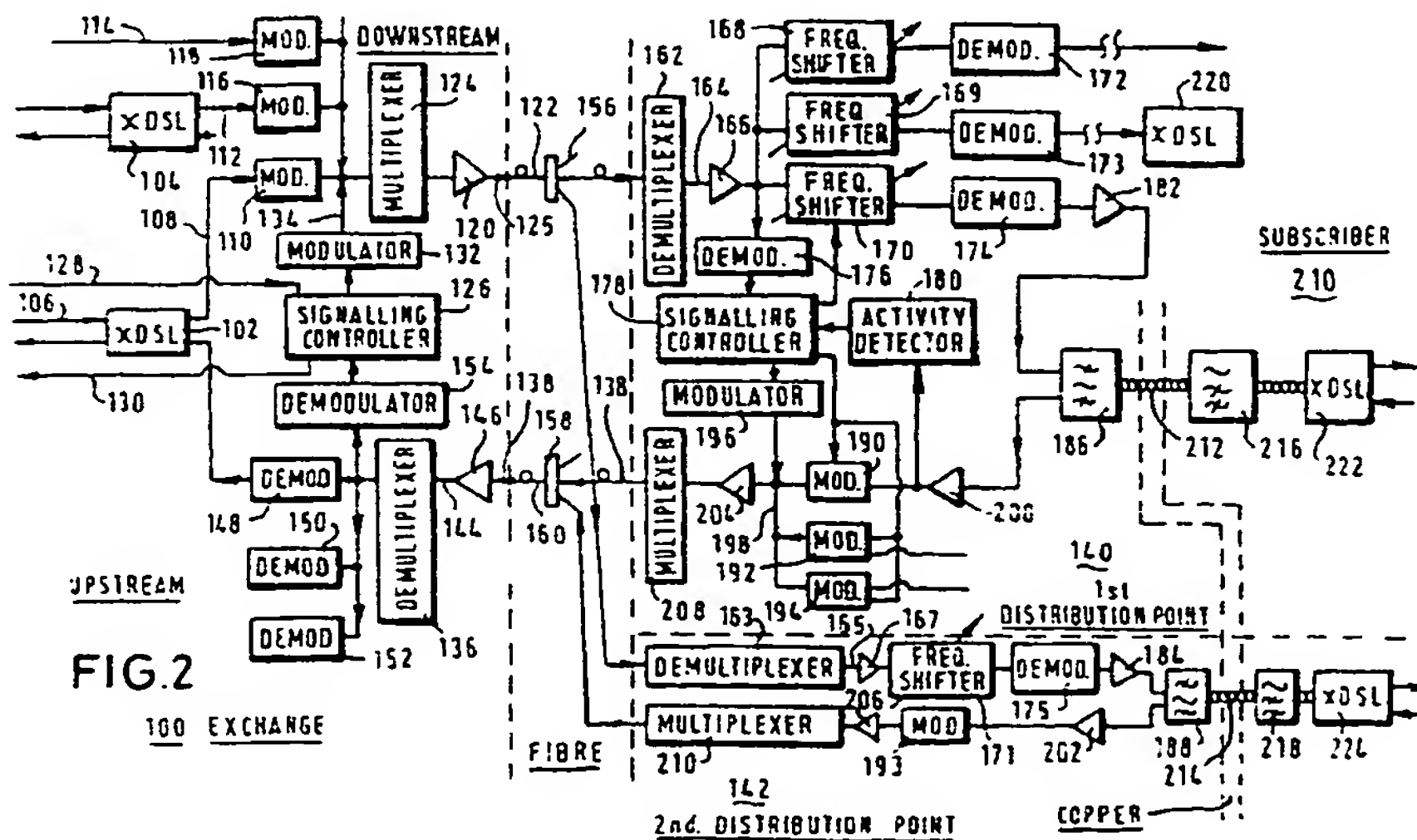
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(54) Communication system architecture, exchange and method of operation

(57) To reduce the complexity, size and power dissipation associated with the deployment of xDSL-type modems in distribution points (140-142) of a telecommunications network, a transparent concentrating optical transmission scheme is interposed between an exchange (100) and a subscriber terminal (210). Specifically, xDSL-type modems (102-104 and 220-224) are employed both within the exchange (100) and, nominally, each subscriber terminal (102) of the telecommunication system, while an optical fibre supports the trans-

mission of frequency division multiplexed broadband signals sent between the exchange (100) and the distribution points (140-142). Twisted-pairs then couple respective broadband signals received and demultiplexed at the distribution points (140-142) to appropriately addressed subscriber terminals (210), while upstream transmissions are subjected to a complementary process from the xDSL modems (220-224) in the subscriber terminals (210) to the xDSL modems (220-224) in the exchange (100).



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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 9101

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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
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X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on or after the filing date D : document cited in the application L : document cited for other reasons S : member of the same patent family, corresponding document	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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